

Creative Strategies for Meeting the Needs of the Lifelong IT Professional

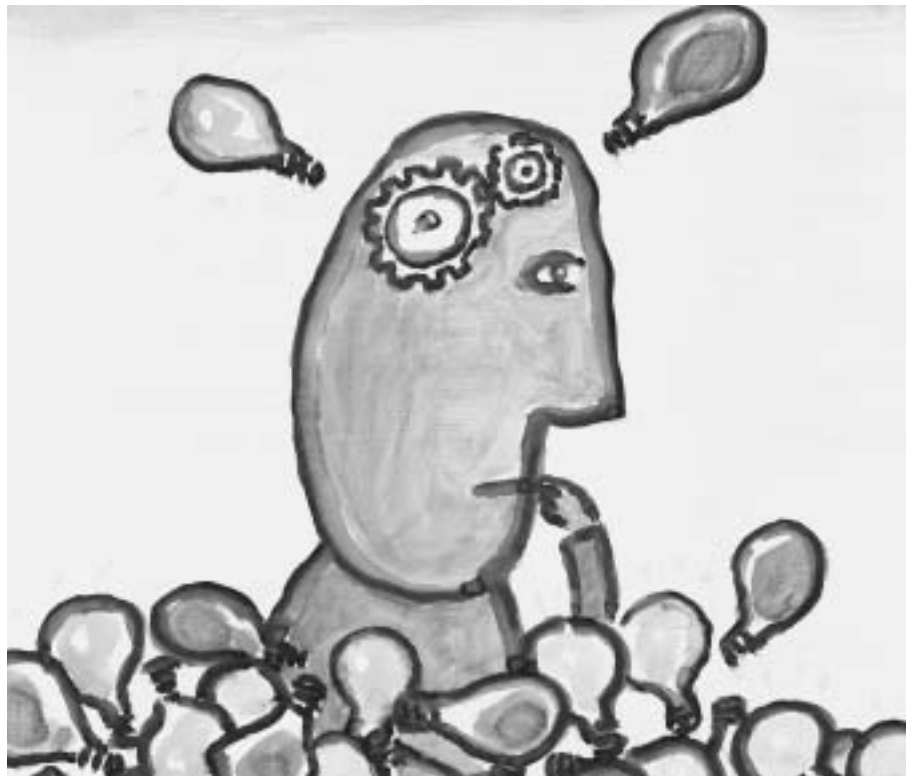
In the face of budget constraints in today's workplace, creative thinking helps identify new solutions to the training needs of IT professionals

By **Lawrence C. Ragan**

It's a little depressing to read pronouncements by pundits stating that the body of knowledge you gained in your four years of higher education will be obsolete within three years of graduation. If you follow this line of thinking, then "Everything I Know I Learned in Kindergarten" is not a joke, and investing in advanced education seems a fruitless endeavor. The truth is that not everything you learned in college goes out of style. Work ethics, a desire to seek new knowledge, and learning how to learn will never go out of vogue.

The challenge, however, is that much of what you need to know in today's workplace was not even conceived of 10, 15, or 20 years ago, when many of us finished our degrees. For technology professionals who embrace the "lifelong learning" concept prevalent in today's marketing of postgraduate learning programs, the issue is not whether to invest in education, but where, when, and how to keep your skills and talents relevant to the workplace.

Adding to the challenge of keeping pace with emerging data and maintaining your own skill set is the need to grow the collective knowledge base and competencies of your staff of IT professionals. As the director of a design and development service for Penn State's World Campus I am continually challenged to find the right training program, at the right cost, for each staff member. As in



many units similar to ours, the skills and competencies necessary for each individual vary greatly. The technologist needs specific skill development in new and emerging technologies; the instructional designers, in pedagogical developments and applications of technology; and the general staff serving multimedia and production needs of the unit, everything in between. At the same time, along with many other institu-

tions we are being asked to reduce unit expenses, and the first casualty of that mandate is often professional development, including travel.

Technical and pedagogical needs aside, I also struggle to provide growth and development for junior management staff in the areas of leadership and team management. Although Penn State provides a wide variety of professional development opportunities that address some

management needs, developing staff adept in applying technology and leadership skills takes time and resources. Unfortunately, more targeted programs in managing instructional technologies are not available locally, yet as a production unit we must provide staff with opportunities to grow their skills without restricting workflow or output.

Increasingly, "normal" staff management strategies include solutions such as work-at-home programs, telecommuting, and space sharing in the workplace. Programs like these have a downside, however, because they can decrease the interactions among staff and may affect the benefits of peer-to-peer learning. Structuring work-at-home and space-sharing policies requires consideration of team dynamics and planning for more asynchronous methods of information sharing and collaboration. Much of the collective intelligence gained from face-to-face interactions now must be realized in other ways, as a result of strategic management decisions. Idea sharing and solutions that once occurred around the office water cooler or in the hallway must now be designed into the workday through more formal meeting structures — never a big hit with staff.

Thinking through the professional and personal growth needs of a varied staff, I am struck by the wide array of "opportunities" available in the workplace that may provide tremendous benefits for learning while addressing unit and institutional needs. Recognizing and matching these opportunities to the appropriate IT staff can present new career paths for promising IT leaders.

The following ideas for addressing the lifelong learning needs of staff have proven to be effective techniques that don't require an increase in travel or the professional development budget. I hope they will stimulate your creative thinking about "acting locally" when it comes to professional development needs.

The "Connection" Solution

Important to an effective professional development plan is recognizing the tools and strategies available in the workplace. Many of these involve creative

assignments to new and ongoing projects, as well as tapping into the emerging virtual communities available through the Internet.

A natural starting point for developing and maintaining job skills is in the workplace. Certainly opportunities abound for learning new and emerging technologies on the job. The intensity of changes in the technical arena is balanced by the fact that everyone in the field is pretty much at the same point, seeking answers to questions that have barely been formulated. Staying competent with new technologies is a matter of "connecting" rather than "attending." That is, establishing an effective network of colleagues is as valuable a professional development experience as attending a trade show or vendor seminar.

Participating in discussion forums can provide almost instant access to the information staff may need or immediate answers to questions. Sometimes, locating the appropriate discussion groups is another barrier for both staff and management. Inquiring through your network of colleagues into worthwhile discussion forums is a great way to identify valuable listservs and bulletins. You may need to try several until you find the right match.

Encouraging staff to participate in discussion groups and forums can effectively facilitate their information networks and build important networks of colleagues. Many organizations, either formally or informally, sponsor spaces for dialog between members. Increasingly, either pre- or postconference electronic forums support the exchange of ideas. In particular, specialized synchronous distance-training programs such as webcasts or audio and video conferencing can provide tremendous learning opportunities that leverage a limited staff development budget.

Another "connection solution" comes from staff participation in face-to-face training programs. Often the need for a skilled staff person to complete an assignment does not lend itself to on-the-job training or the slower communications network approach. When you need a skilled labor force immediately, you may need to locate an appropriate

training program. Although often more costly, training programs abound in highly technical skills that can jumpstart the project and use a sort of immersion strategy to train participants. For example, with the emergence of the IMS standards, having staff trained in the use of XML may be an immediate need, and the investment of resources can reduce long-term costs.

Participation in the right program can quickly increase productivity, but budget restrictions can lead to elimination of such training. In some cases vendors may be willing to bring their program to you. A training program tailored and delivered locally to several staff can deliver a cost savings even with added travel expenses for the vendor. Even better, locating another unit within the institution to share costs can train more staff than could attend an out-of-town training session while reducing charges to your budget.

The "connection solution" is based on the belief that support for addressing our lifelong learning needs can come from those in similar positions. Whether staff connect with colleagues during face-to-face training or through an active online discussion forum, they benefit from connecting with people having like needs and interests. Colleagues often are willing and able to share information, provide advice, and, in some cases, identify the most effective strategies for keeping skills relevant and updated.

Growing the IT Manager/Leader

Calling for a bit more creativity, and certainly requiring a longer growth curve, are the nurturing and development of management and leadership skills for the IT professional. Given the breadth of skills necessary to succeed in managing an information technology operation, finding the right mix of technical training and management and leadership ability can be a daunting assignment for any IT professional. As many have experienced, it is often difficult to find qualified individuals to serve as managers and leaders in heavily technical areas. Individuals strong in the technical arena often do

not possess business or personnel skills necessary to manage staff resources, lead a unit through the rapid pace of change, and maintain the services necessary to meet the institution's demands. Additionally, technically skilled staff may not aspire to higher management or leadership positions and may not have a desire to grow in these areas.

Always a challenge is identifying those individuals within the unit who possess the potential for leadership, and nurturing that potential through special assignments and projects. One effective strategy in identifying potential leaders among your staff is to float special-project requests around the unit and watch the response. Some staff will rise to the challenge and demonstrate their capability to serve the unit in new ways. Others may express, either verbally or through their actions, a desire to continue to contribute at the current level and avoid additional responsibilities.

Occasionally staff need to be coaxed or coerced into trying on the management or leadership mantle while they decide if it fits their style and ambitions. Another effective strategy is to enable the leadership role to move from person to person, perhaps on a schedule or based on the phase of the project, in order to balance the power continuum within the unit.

Cynthia Golden, in "Planning for Professional Development — Advice for the Manager" (*EDUCAUSE Quarterly*, Vol. 25, No. 1), identified recognizing and internalizing the vision and strategic goals of the institution as a critical element of leadership skills for IT staff. One method of introducing staff to the institution's strategic goals is to place key people on committees at the institutional level. Requesting membership on a variety of planning and operational teams provides a powerful introduction to the intricacies of institutional management. Moreover, having a voice in discussing strategic institutional initiatives gives the IT professional invaluable training and an opportunity for personal growth.

Going the other way and providing



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a forum for feedback from the IT professional to the rest of the unit can extend the lessons learned to the rest of the staff. In the larger context, providing staff the opportunity to participate in national or international initiatives further leverages individual growth and can provide leadership opportunities outside the institution.

Encouraging staff to develop and deliver presentations and workshops at conferences can force the IT professional to focus on key issues as well as hone existing skills. Furthermore, encouraging staff to collaborate with colleagues outside their institution increases the potential for leadership and extends the personal networks that can benefit the institution as well as the individual. Addi-

tionally, passing on consulting opportunities to the developing IT professional creates tremendous learning experiences and development of new leadership skills. Working with the staff on their PD plans may include permitting limited consultation work and establishing goals such as biannual publication of papers in journals and trade publications.

A Personal Challenge

As the director of an instructional technology staff possessing a range of talents and capabilities, I find myself personally challenged to maintain the skills and competencies necessary for effectiveness within a changing workplace. Ten years ago my professional development goals were much easier to identify. As an instructional designer within Penn State's Academic Computing facility I focused on improving my instructional design skills and obtaining a healthy dose of the application of technology to learning. My development needs were met, for the most part, through my participation in a limited number of organizations and societies.

Today, I manage and lead my team in creating online learning environments for students at a distance. This position requires a far greater breadth of skills and a working "language" for communicating with a broad range of designers, technologists, and other production specialists. On top of these functional requirements I am challenged to predict the future, select a path, and lead the design and development of a principled approach to online learning.

One of the most effective strategies I have found for maintaining my leadership competencies has been the personal networking and benchmarking with colleagues in a variety of other institutions. Of particular value have been interactions in international relationships established through discussion groups and face-to-face encounters. The key to this method is building personal connections and trust with colleagues and expressing a willingness to share as well as take from the relationship. Whether through benchmarking trips, consulting visits, or regularly sched-

uled audio conferences, sharing struggles and strategies can alleviate the stress of going it alone. These interactions also stimulate thinking about new approaches to current issues.

Recently, a management consultant told me that every leader must be keenly aware of the skills and competencies required for each position on his or her staff. The challenge for the leader is balancing the degree of detail with the need to manage at the unit level. Bar none, the most effective professional development activity for me in the past three years has been to perform the tasks our unit assists others in accomplishing. In other words, I've been my own customer.

My unit produces the courses for delivery via Penn State's World Campus. Through an affiliate faculty position within our College of Agriculture, I have designed and delivered a three-credit course online. The pains and joys of that process enabled me to remain in touch with each staff position in my unit. Additionally, I am

better positioned to serve our key clientele, the faculty, because I have experienced the same challenges and difficulties they experience working with my unit. I can also better envision solutions to problems when I've experienced the struggles first hand.

Thinking Creatively

Many techniques and strategies for growing the next generation of IT leaders are available in the workplace. Budget reductions and travel restrictions challenge us to look internally for opportunities to grow the skills of staff. Being creative and open to some degree of risk can pay back immensely when we witness a promising member of our staff emerge from a committee assignment or special project with a renewed sense of commitment and interest in serving the unit in a management or leadership capacity. Invariably, staff who participate in these opportunities recognize the challenges of leadership and are more prone to assist in management of the unit.

On a personal level, identifying and participating in dialogue with colleagues in similar and dissimilar institutions can validate your struggles and add to your knowledge of new solutions. Engaging in this communication need not be expensive, but it does require time and energy to prosper. Effectively using e-mail, bulletin boards, audio conferencing, and videoconferencing can all be accomplished within existing PD budgets and can be leveraged across the entire unit.

Finally, maintaining personal contact with the core services of the unit by participating in its operation and using those services can tie you to reality like nothing else can. The time and energy come from outside regular hours, but the paybacks are endless. The challenge to leadership is to lead through experience, both personal and professional. *C*

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